

Trophic Levels Notes

1. Energy moves through an ecosystem in the form of food.
 - a. An organism that makes its own food, such as a plant, is called a producer.
 - b. Consumers, like grasshoppers, eat other organisms.
 - c. Decomposers, such as bacteria and fungi, use dead organisms and the waste material of other organisms for food.
 - d. Let's take it a step farther.
 1. Producers use energy from the sun to make their own food.
 2. Primary consumers (herbivores) eat only plants or parts of plants.
 3. Secondary consumers (carnivores) eat herbivores or other carnivores.
 4. Omnivores are both primary and secondary consumers which means they eat both plant & animal.
 5. Decomposers break it down and return the nutrients back into the ecosystem to be recycled.
2. How do we model the flow of energy?
 - a. A food chain models how energy from food passes from one organism to another.
 - b. A food web is a series of overlapping food chains that shows all the possible feeding relationships in an ecosystem.
 - c. Producers make their own food, so they are able to utilize 100% of the energy they produce, but as the flow of energy moves throughout the ecosystem, less & less of the energy is available for the next organism.
 1. These complex interactions are referred to as the energy pyramid. The levels of the pyramid represent the types of organisms present in any ecosystem and scientists refer to these levels as trophic levels.

